

Title (en)

SYSTEM AND METHOD FOR RENEWABLE ELECTRICAL POWER PRODUCTION USING WAVE ENERGY

Title (de)

SYSTEM UND VERFAHREN ZUR ERZEUGUNG VON ERNEUERBAREM ELEKTRISCHEN STROM MITTELS WELLENENERGIE

Title (fr)

SYSTÈME ET PROCÉDÉ POUR LA PRODUCTION D'ÉNERGIE ÉLECTRIQUE RENOUVELABLE UTILISANT L'ÉNERGIE DES VAGUES

Publication

EP 2585710 B1 20190911 (EN)

Application

EP 11798512 A 20110623

Priority

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- US 2011001121 W 20110623

Abstract (en)

[origin: WO2011162817A1] The system produces electricity through the conversion of wave energy. A wave-engaging forward barge and an after barge are connected by hinges to a center inertial barge, allowing for articulated motion. Attached to central barge is a damper plate to minimize the heaving motion of the central barge, thereby minimizing vertical displacement and increasing stability of central barge. The concentrated weight of the plate supported by side spuds produces a pendular action, causing a pitching motion of the center barge which enhances the relative angular motions of the barge pairs. Resonance of the barges is achieved by a movable ballast weight that can be positioned in each barge to adjust the mass moment of inertia of the barge, thereby changing the natural pitching frequency. Dual-acting hydraulic pumps have their outputs rectified by a control system and smoothed by accumulators.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (examination)

- US 2010140944 A1 20100610 - GARDINER ALISTER [NZ], et al
- WO 2005085632 A1 20050915 - OCEAN POWER TECHNOLOGIES INC [US]
- EP 1115976 A1 20010718 - YEMM RICHARD [GB], et al

Designated contracting state (EPC)

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DOCDB simple family (application)

US 2011001121 W 20110623; AU 2011269845 A 20110623; CN 201180038892 A 20110623; EP 11798512 A 20110623; KR 20137001732 A 20110623; US 201113635362 A 20110623; ZA 201108406 A 20111116